

Figure S6 (Related to Figure 5)

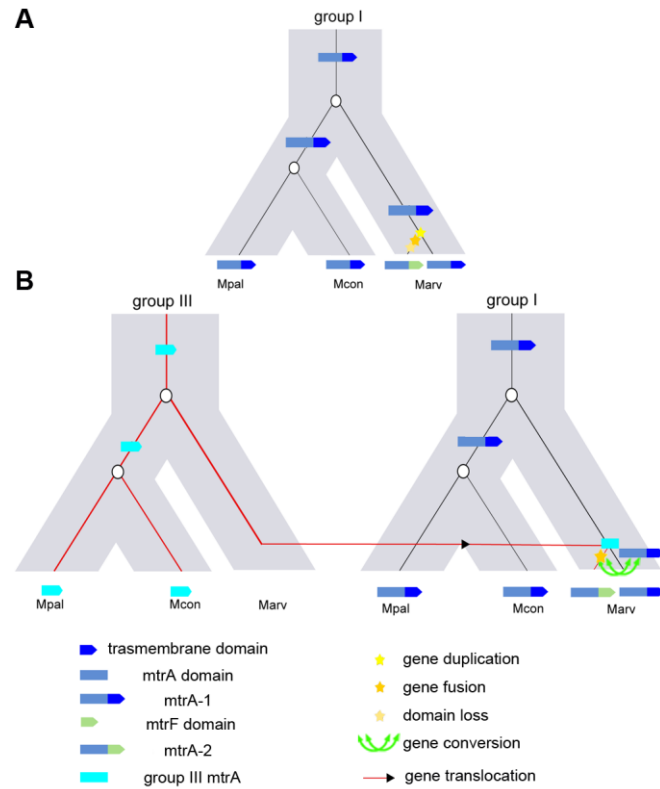


Figure S6 (Related to Figure 5). Two different scenarios in regards to the additional copy of group I *mtrA* in *Methanocella arvoryzae*. (A) The additional copy of group I *mtrA* (*mtrA-2*) in *Marvs* generated by a lineage-specific duplication of group I *mtrA* (yellow star), gene fusion (orange star) and the loss of the C-terminal transmembrane domain (light yellow star). (B) *mtrA-2* in *Marvis* generated via the translocation of group III *mtrA* followed by the fusion with *mtrF* and gene conversion (indicated as green arrow). Each branch in grey represents a speciation event. The abbreviation of species names are as follows: *Marv*, *Methanocella arvoryzae*; *Mcon*, *Methanocella conradii*; *Mpal*, *Methanocella paludicola*.